

is a wealth of material to be developed some day. Some attic will reveal its treasure of letters. The 2,000 or 3,000 John Abbot drawings known to have been collected by Leconte the elder probably still exist. There are thousands of letters to and from the Lecontes tucked away somewhere waiting for editing. Time flies. There are only a score left out of the thousand who read Dr. Horn's laconic telegram of 1883: "Dr. Leconte died at 1.30 o'clock this afternoon," and there is no tyro in beetledom who does not know the man.

NOTES ON ORTHOPTERA FROM THE EAST COAST OF FLORIDA WITH DESCRIPTIONS OF TWO NEW SPECIES OF BELOCEPHALUS.

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NEW BRIGHTON, STATEN ISLAND, N. Y.

Nearly the entire month of September, 1913, was spent in company with Mr. Charles E. Sleight collecting insects and other natural history objects of interest at several places along the east coast of Florida from Jacksonville to Key West. The writer paid particular attention to the Orthoptera and in all ninety-two species were secured, those from the vicinity of Jacksonville having been turned over to Messrs. Rehn and Hebard, of the Academy of Natural Sciences of Philadelphia, for study in connection with some of their North Florida material. The remaining species collected at La Grange and southward are here recorded, including two new species of *Belocephalus*, and the very interesting *Phrixa maya*, a large green Katydid-like creature, originally described from Mexico, and now reported for the first time from the United States.

Mr. Howard Chaudoin, of La Grange, and the family of Mr. Wm. H. Sands, of Big Pine Key, have sent me specimens collected in the fall of 1913. These have been here mentioned in connection with the various species.

In New York and New Jersey *Chortophaga viridifasciata* may be found as a mature insect from April to September; the species of *Hippiscus* and *Arphia sulphurca* mature in the spring and die by the

first of August; the majority of the Orthoptera, however, mature about mid-summer and abide until killed by the cold of autumn. The collector in Florida finds no such precision of appearance among Orthoptera, for even as far north as Jacksonville, *Dichromorpha viridis* may be found from April to November, and probably occurs during the intervening months as well. *Scirtetica marmorata picta*, *Psinidia fenestralis* and a number of other species may be found in a mature state during most of the year in central Florida, and in the southern part of the state, the adults of most species may be met with at most any time. Thus we have collected nymphs and adults of *Stilpnochlora marginella* Serv. at Fort Myers and vicinity, in March and April, and at Miami an adult male and two nymphs, one about one half grown and the other very small, were found in September. While the individuals of a species show a tendency to mature about the same time, some few, by reason of their strength and by good fortune in escaping their enemies, do long outlive the majority of their kind.

FORFICULIDÆ.

Anisolabis annulipes Lucas.

Ocean Beach, Miami, Sept. 23, 1 female.

At Pablo Beach in North Florida on Sept. 27, 1913, a female and her sixteen little ones were found in a cell under an old railroad tie. The young ranged from three to four millimeters in length.

Anisolabis maritima Gené.

Cocoanut Grove, Sept. 14; Big Pine Key, Sept. 19, 20; Key West, Sept. 16, 17. Found by turning over the sea-weed lying on the beach.

Labidura bidens Olivier.

Miami, Sept. 22, 1 female.

BLATTIDÆ.

Ischnoptera nigricollis Walker.

La Grange, October (Chaudoin).

Ischnoptera uhleriana fulvescens S. and Z.

Miami, Sept. 24, 1 female; Cocoanut Grove, Sept. 14, 1 male; Big Pine Key, Sept. 19, 20, 1 male, 1 female.

Ceratinoptera diaphana Fabr.

Big Pine Key, Sept. 19, 1913, one.

Ceratinoptera lutea S. and Z.

La Grange, Sept. 10, one.

Eurycotis floridana Walker.

Miami, Sept. 22, 24; Key West, Sept. 17; Big Pine Key, Sept. 19.

Periplaneta americana Linn.

La Grange, Sept. 10, 1 female.

Periplaneta australasiæ Fabr.

La Grange, Sept. 12, 1 female, 1 nymph.

Pycnoscelus surinamensis Linn.

La Grange, Sept. 9, 11, 12; Miami, Sept. 22, 23, 25; Cocoanut Grove, Sept. 14; Key West, Sept. 16.

MANTIDÆ.

Stagmomantis carolina Johannson.

La Grange, Sept. 11, 1 male; Miami, Sept. 24, nymph; Big Pine Key, Sept. 20, 2 nymphs; Key West, Sept. 17, 2 nymphs.

Gonatista grisea Fabr.

Miami, Sept. 22; Big Pine Key, Oct. 1 male, 1 female (Sands).

Thesprotia graminis Scudd.

La Grange, Sept. 12, 2 females; Key West, Sept. 16, 18, 2 females.

PHASMIDÆ.

Manomera tenuescens Scudd.

La Grange, Sept. 12, 2 females; Miami, Sept. 22, 1 female.

Manomera brachypyga R. and H.

La Grange, Sept. 9, 12, 4 males, 1 female.

The two species of *Manomera* were found on the low vegetation in the pine woods at night with the aid of a lantern, when they were active and walking about.

Anisomorpha buprestoides Stoll.

La Grange, Sept. 10, 11, 3 males, 2 females; Miami, Sept. 23, 1 male, 1 female; Big Pine Key, Sept. 20, 3 males, 3 females.

This fat and lubberly insect, which is always ready to squirt a charge of acrid, condensed-milk-like fluid at the collector, was in evidence at all the places visited. While it has been my experience in various parts of Florida to find more nymphs of this species in the spring, yet adults may be found at any season, and each female usually

has attached to herself one of the diminutive males. While we were at La Grange Mr. Sleight discovered under the bark of a dead tree four pairs in copulation and a single male, all closely associated. At night the insect becomes much more active.

ACRIDIDÆ.

Nomotettix floridanus Hancock.

La Grange, Sept. 12, 1 male.

Neotettix femoratus Scudd.

La Grange, Sept. 9, 11, 12, 3 females; Miami, Sept. 25, 1 male.

Tettigidea lateralis Say.

La Grange, Sept. 13, 1 female.

Radinotatum brevipenne Thomas.

La Grange, Sept. 9, 10, 12, 13, 5 males, 4 females; Miami, Sept. 25, 1 female.

Radinotatum brevipenne peninsulare R. and H.

Miami, Sept. 22, 25, 1 male, 1 female; Big Pine Key, Sept. 20, 1 male.

Mermiria intertexta Scudd.

La Grange, Sept. 12, 1 female; Ocean Beach, Miami, Sept. 23, 1 male; Miami, Sept. 22, 1 female; Big Pine Key, Sept. 19, 20, 7 males, 4 females, 1 nymph.

Syrbula admirabilis Uhler.

La Grange, Sept. 9, 10, 12, 3 males, 2 females.

Amblytrophidia occidentalis Sauss.

La Grange, Sept. 9, 10, 11, 7 nymphs; Miami, Sept. 21, 1 nymph; Big Pine Key, Sept. 19, 20, 2 females.

Orphulella pelidna Burm.

La Grange, Sept. 9, 10, 11, 12, 3 males, 6 females; Miami, Sept. 23, 25, 2 females; Cocoanut Grove, Sept. 14, 1 nymph; Big Pine Key, Sept. 19, 20, 3 males, 4 females; Key West, Sept. 16, 2 males, 2 females.

Dichromorpha viridis Scudd.

La Grange, Sept. 9, 11, 6 males, 3 females.

Clinocephalus elegans Morse.

La Grange, Sept. 13, 1 male, 1 female; Big Pine Key, Sept. 19, 1 male.

***Arphia granulata* Sauss.**

La Grange, Sept. 9, 1 male, 1 female; Big Pine Key, Sept. 19, 20, 2 males, 1 female; Key West, Sept. 16, 17, 18, 6 males, 4 females.

***Cortophaga australior* R. and H.**

La Grange, Sept. 9, 10, 11, 2 males, 7 females; Miami, Sept. 25, 1 female; Coconut Grove, Sept. 14, 1 female; Big Pine Key, Sept. 19, 1 male; Key West, Sept. 16, 17, 18, 7 males, 8 females.

***Hippiscus phœnicopterus* Germ.**

La Grange, Sept. 13, 1 male.

***Scirtetica marmorata picta* Scudd.**

La Grange, Sept. 9, 11, 12, 13, 5 males, 4 females; Ocean Beach, Miami, Sept. 23, 3 males, 2 females; Miami, Sept. 22, 1 female; Coconut Grove, Sept. 14, 4 males.

***Psinidia fenestralis* Serv.**

La Grange, Sept. 9, 10, 3 males, 2 females; Miami, Sept. 24, 1 female; Ocean Beach, Miami, Sept. 23, 2 males, 1 female; Coconut Grove, Sept. 14, 2 males.

***Trimerotropis citrina* Scudd.**

Key West, Sept. 16, 17, 4 males, 3 females. On the seashore sand at Ocean Beach, Miami, on Sept. 23, 5 males and 3 females were collected that have pink hind femora and resemble *citrina* except that the black band on the hind wings is narrow, as in *maritima*. They may, however, be *maritima*, for in the author's collection there is a female *maritima* from Fire Island, N. Y., with pinkish hind femora.

***Rhomalea microptera* Beauv.**

La Grange, Sept. 12, 1 male, 1 female; Miami, Sept. 22, 1 female. Several of these large grasshoppers in a flower bed will destroy a number of the plants, and so at La Grange the country people often killed them on sight.

***Leptysmia marginicollis* Serv.**

La Grange, Oct., 1913, female (Chaudoin).

***Schistocerca americana* Drury.**

La Grange, Ocean Beach, Miami, Big Pine Key, Key West. Mature individuals of this species are to be found at all seasons in central and northern Florida, and many recently matured individuals are to be found in the southern part of the state, at least on the West Coast in March and April. Again in the fall some of the individuals

found have but recently matured, as their elytra are still soft and they haven't acquired their full power of flight.

Schistocerca alutacea rubiginosa Harris.

La Grange, Sept. 12, 1 male; Miami, Sept. 22, 1 male, 2 females.

Schistocerca obscura Fab.

La Grange, Sept. 10, 1 male; Miami, Sept. 22, 1 female.

Schistocerca damnifica calidior R. and H.

La Grange, Sept. 9, 11, 12, 5 males, 2 females; Miami, Sept. 22, 1 female.

Eotettix signatus Scudd.

La Grange, October, 1 female (Chaudoin).

Melanoplus rotundipennis Scudd.

La Grange, Sept. 9, 10, 12, 13, 4 males, 4 females.

Melanoplus keeleri Thomas.

La Grange, Sept. 9, 10, 11, 12, 5 males, 5 females; Miami, Sept. 22, 23, 2 males, 1 female.

Paroxya atlantica Scudd.

La Grange, Sept. 11, 13, 3 males; Miami, Sept. 23, 24, 25, 2 males, 1 female; Cocoanut Grove, Sept. 14, 1 male.

Paroxya atlantica paroxyoides Scudd.

Big Pine Key, Sept. 19, 20, 21, 3 males, 4 females; Key West, Sept. 16, 18, 9 males, 8 females.

Aptenopedes sphenarioides Scudd.

La Grange, Sept. 9, 11, 12, 4 males, 4 females.

Aptenopedes clara Rehn.

Miami, Sept. 22, 25, 3 males, 1 female; Ocean Beach, Miami, Sept. 23, 1 male, 1 female; Cocoanut Grove, Sept. 14, 1 nymph; Big Pine Key, Sept. 19, 1 male, 2 females, 3 nymphs; Key West, Sept. 16, 1 male, 1 female, 1 nymph.

Aptenopedes aptera Scudd.

La Grange, Sept. 9, 10, 11 males, 18 females, 2 female nymphs; Miami, Sept. 22, 25, 5 males, 3 females; Cocoanut Grove, Sept. 14, 1 female. This species is active at night, when it is no uncommon sight to see several of the grasshoppers devouring the leaves of the scrub palmetto into which they make half-moon shaped cuts eating down to the midrib.

TETTIGONIDÆ.

Scudderia texensis Sauss and Pictet.

La Grange, Sept. 12, 13, 3 males, 1 female; Miami, Sept. 22, 1 male.

Scudderia furcata Brunner.

La Grange, Sept. 12, 1 female.

Scudderia cuneata Morse.

Miami, Sept. 24, 2 males.

The apical expanded portion of the anal segment shows considerable variation in specimens from Florida all referred to this species.

Amblycorypha floridana R. and H.

La Grange, Sept. 11, 1 male, 1 female; Big Pine Key, Sept. 20, 2 males, 2 females.

Microcentrum rostratum R. and H.

Miami, Sept. 22, 1 male; Big Pine Key, Sept. 19, 20, 2 females.

Microcentrum rhombifolium Sauss.

Miami, Sept. 22, 1 male.

Stilpnochlora marginella Serv.

Miami, Sept. 22, 23, 1 male and two nymphs, all from Brickell's Hammock. We found this insect mature at Ft. Myers on the west coast in March, 1912.

Phrixa maya Sauss and Pictet.

Miami, Sept. 22, 1 male.

Mr. Sleight and I were "shining the road" that leads through Brickell's Hammock with our lanterns on the evening of Sept. 22, 1913, when this peculiar insect was found on the side where my friend was walking. He kindly turned it over to me for study, and its identification was made easy by the excellent cut of a male *Phrixa maya* on Plate XVI, fig. 2, Vol. 1 of *Biologia Centrali-America*, Orthoptera, in which volume the insect is also described. The authors have this to say: "A very peculiar genus, the species of which have broad and obliquely truncated elytra. In the males the anal field is very small, coriaceous, densely punctate-reticulate, and the stridulating vein is very obsolete above on the left elytron. This genus is known only from Mexico." The development of the cerci is also remarkable. The type came from "Mexico, Valladolid in Yucatan (Gaumer)," and the discovery of the insect in Florida is of much interest and adds a species to the known fauna of the United States.

***Crytophyllus floridensis* Beut.**

La Grange, Sept. 10, 11, 12, 1 male, 1 female, 1 nymph

We sometimes heard among the oaks and cabbage palms, but not in the pine woods, a low *chluck, chluck*, evidently the call of some large insect, though its carrying power was poor and one had to be quite near in order to hear it. There were several of the insects about, and one evening when the moon was shining brightly and with the aid of a lantern, one was discovered among the leaves of a cabbage palm. Enough was seen to identify it with a *Crytophyllus floridensis* presented to me by young Mr. Chaudoin, and the next day I knocked a female of the same species from a cabbage palm into my umbrella. A nymph was found at night hanging from moss on a low palmetto, drying itself, having just shed its skin. This nymph was brownish in color, but the adult male and female were all green. The type came from near Grant, also on the east coast of Florida, and was described as greenish gray in color, but it probably was all green in life. Mr. Beutenmuller reports its stridulation as a "continuous Ker-Ker-Ker-Ker, with about one second interval of rest," but to the writer the note sounded more like *chluck, chluck*, and we used to speak of them as "the chlucks."

Near Miami, one hundred and eighty miles to the south of La Grange, one of these insects was heard stridulating every evening in the latter part of September. It lived among the Spanish moss in a large oak in a clearing, and as it always took alarm at the light of my lantern it could not be observed, much less collected. *Crytophyllus floridensis* is a larger species than the well-known Katy-did of the north, though its call note is quite feeble in comparison. Owing to several peculiarities of structure it has been placed in a genus by itself called *Lca*, by Mr. Andrew N. Caudell (Journal N. Y. Ento. Soc., vol. XIV, p. 42, March, 1906), who has also described the female. There is another species of Katy-did living in Florida, which was heard in some numbers near Ortega, along the St. Johns River, not far from Jacksonville. Its note is loud and like that of *Crytophyllus per-spillatus*.

***Belocephalus subapterus* Scudd.**

La Grange, Sept. 10, 1 brown female in grass by railroad; Sept. 11, 1 green female (Ds); October, 2 green males, 1 green female and 2 brown females (Chaudoin). The identification of the females is a

trifle uncertain, but from locality and association with the males they are probably *subapterus*.

***Belocephalus sabalis* Davis.**

Miami, Sept. 22, 2 green males; Sept. 24, 1 green male; Sept. 25, 4 green males and 1 brown male; Cocanut Grove, Sept. 14, 1 green male.

These specimens from the east coast of Florida agree with those collected at Punta Gorda, the type locality, in November, 1911. The longitudinal lines on the head and thorax usual in *Belocephalus* are present in this species, but fade away after death.

***Belocephalus sleighti*, new species.**

Types, green male and brown female, Big Pine Key, Monroe Co., Fla., Sept. 19, 20, 1913. Mandibles black, the upper surface of the head and pronotum in the green male with a faint line on either side of a yellowish color; these lines are pronounced in the brown female and bordered interiorly with blackish. Fastigium sharp pointed, not as long as in *sabalis*, slightly bent downward and tipped with black. Inferior basal tooth of fastigium in female also tipped with black. The antennæ are unicolorous, a little longer than the body in the male and somewhat shorter in the female. Tegmina about two thirds as long as the pronotum. Abdomen with a scarcely perceptible carina. Legs unicolorous, except the tips of the spines which are black. The supranal plate of the male with the inner sides of the V-shaped notch rounded and the notch itself not nearly so broadly open as in *sabalis*. The subgenital plate of the male is notched and has two stout appendages (styles) with rounded extremities. They are about twice as long as broad. The outer extremities of the plate are not bent upward and inward and produced into points.

	Male. Mm.	Female. Mm.
Length of body	40	42
Length of fastigium beyond base of antennæ	2.5	3
Length of pronotum	10	10.5
Length of tegmen	7	3
Length of caudal femur	18	20
Length of ovipositor		17

In addition to the types twelve green and two brown males, one green female and two nymphs have been examined from Big Pine Key, all collected on Sept. 19 and 20, 1913. They were captured at night on the scrub palmettos and various low bushes, and their song was much like that of *Belocephalus sabalis* as described in this JOURNAL, Vol. XX, p. 122, June, 1912. This insect is named after

Mr. Charles E. Sleight of Ramsey, N. J., the companion on my journey.

***Belocephalus micanopy*, new species.**

Types, green male and brown female, Big Pine Key, Monroe Co., Fla., Sept. 19 and Oct., 1913. Mandibles, lower edge of front and base of antennæ beneath, black. The upper surface of the head and pronotum with a faint line on either side of a yellowish color, which is bordered interiorly with blackish. These stripes extend from the fastigium backward to the base of the thorax in the male and on to the abdomen in the female. They are more parallel in the female than in the male. The area included between the stripes is darker in the female than the general body color, thus forming a brown dorsal stripe edged with blackish and straw color. Fastigium short, blunt pointed and tipped with black. Inferior basal tooth of fastigium also tipped with black. Antennæ longer than the body in the male, not quite as long in the female, with the first joints in both sexes annulated with black, the color fading out toward the tip. Abdomen with a scarcely perceptible, interrupted carina. The femora and tibiæ of all of the legs blotched with brown at the knees, and the tips of the spines are black. The supra-anal plate of the male with the V-shaped notch not broadly open and its inner sides rounded. The subgenital plate of the male has two tapering appendages (styles) that are about three times as long as broad. The outer extremities of the plate are bent upward and inward and produced into points.

	Male, Mm.	Female, Mm.
Length of body	30	30
Length of fastigium beyond base of antennæ	2	2
Length of pronotum	9	9
Length of tegmen	7.5	3
Length of caudal femur	16	16
Length of ovipositor		19

In addition to the types, three brown males have been examined, all from Big Pine Key. The female type and two of the males were collected in October, 1913, and sent to me by the family of Mr. Wm. H. Sands; the remaining two males were collected on Sept. 19, 1913. They were found among the leaves of the silver-palm, *Coccothrinax argentea* Lodd, which is not uncommon on Big Pine Key. The song of this species is slow and readily distinguishable from that of *Belocephalus sleighti*. The male type is slightly larger than some of the other males of the series.

Six species of *Belocephalus* are now known from Florida and there are probably several others to be discovered. The insects cannot fly and are not active walkers, so they do not get about much.

It is, therefore, not remarkable that every few hundred miles a different species should appear, especially on some of the Keys like Big Pine Key, which lies about thirty-five miles to the south of the mainland of Florida.

Females of five of the species are known and it is of interest that the stripes that commence at the fastigium and extend backward to the posterior margin of the prothorax, or on to the abdomen in some individuals, are nearly parallel, whereas in the males these stripes diverge as they extend backward from the head to the posterior margin of the prothorax. In brown individuals there is a conspicuous darker dorsal band the sides of which are either parallel or divergent on the head and thorax according to sex.

It may be well to state that the natural colors in *Belocephalus* and other green Katy-did-like insects can best be preserved by placing them when dead in a solution of about nineteen parts of water to one of commercial formalin. They should be packed tightly enough in the bottle to prevent their being jostled about in traveling, and should be removed after a few weeks' stay at most in the solution.

Scudder described *Belocephalus subapterus* in the Proceedings of the Boston Society of Natural History, Vol. XVII, 1875, and in a paper by the writer on "Three New Species of *Belocephalus* from Florida," this JOURNAL, Vol. XX, p. 123, June, 1912, additional facts were made known.

The six species so far described may be separated as follows:

Vertex of the head produced as a stout sub-cylindrical thorn tapering apically.

Body of male about 40 mm. in length; antennæ unicolorous. The outer extremities of the subgenital plate not bent upward and inward, and not produced into points.

Supra-anal plate with the inner sides of the V-shaped notch nearly straight. Hind femora about 20 mm. in length.*sabalis* Davis.

Supra-anal plate with the inner sides of the notch rounded. Hind femora about 18 mm. in length.*sleighti* n. sp.

Body of male about 34 mm. in length; antennæ spotted. The outer extremities of the subgenital plate not bent upward and inward and produced into sharp points.*subapterus* Scudd.

Body of male about 34 mm. in length; antennæ spotted. The outer extremities of the subgenital plate bent upward and inward and produced into sharp points.*hebardei* Davis.

Vertex of the head rounded, no thorns.

Body of male about 25 mm. in length. The outer extremities of the sub-

genital plate are not bent upward and inward into points. Supra-anal plate with the V-shaped notch very broad and its inner sides straight.

rehni Davis.

Body of male about 30 mm. in length. The outer extremities of the subgenital plate bent upward and inward and produced into points. Supra-anal plate with the V-shaped notch not broadly open and its inner sides rounded.....*micanopy* n. sp.

As the vertex of the head is subject, particularly in some of the species, to a little variation it may be well to supplement the foregoing table for the assistance of those without a series of specimens at hand.

Outer extremities of the subgenital plate bent upward and inward and produced into points. Antennæ spotted.

Vertex of the head rounded, no thorn. (Big Pine Key, Fla.)

micanopy n. sp.

Vertex of the head sharp pointed. (Punta Gorda, Fla.)...*hebardei* Davis.

Outer extremities of the subgenital plate not bent upward and inward and produced into points.

Antennæ spotted.

Vertex of the head sharp pointed. (N. E. Fla., etc.)

subapterus Scudder.

Vertex of the head rounded, no thorn. (Newberry, Fla., type loc.)

rehni Davis.

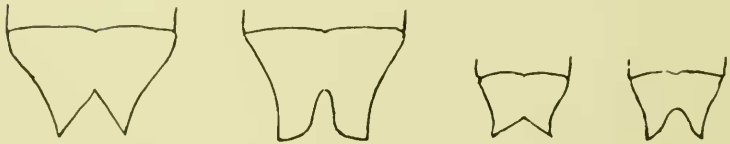
Antennæ unicolorous, body of male about 40 mm. in length, vertex of head sharp pointed.

Supra-anal plate with the inner sides of the V-shaped notch nearly straight. Hind femora about 20 mm. in length. (Southern Fla.)

sabalis Davis.

Supra-anal plate with the inner sides of the notch rounded. Hind femora about 18 mm. in length. (Big Pine Key, Fla.)

sleighti n. sp.



B. sabalis.

B. sleighti.

B. rehni.

B. micanopy.

Viewing the material at hand as a whole we find *Beloccephalus sabalis* and *sleighti* to be large and robust species, while the others are smaller and do not give one the impression of being such fat, lubberly insects. In *subapterus*, *rehni* and *hebardei* the supra-anal

plate is similarly shaped, though slight differences appertain in this respect to each of the three species.

Pygocorypha uncinata Harris.

Miami, Sept. 22, 23, 24, 25, 11 males, 7 females, all of them brown in color and many eating grass at night. None were heard singing.

Neoconocephalus mexicanus fuscostriatus Redt.

Big Pine Key, Sept. 20, 1 male. A male was heard singing in a garden in Key West.

Odontoxiphidium apterum Morse.

La Grange, Sept. 9, 10, 11, 12, 3 males, 10 females, 1 nymph; Miami, Sept. 22, 23, 24, 25, 3 males, 5 females; Cocoanut Grove, Sept. 14, 6 males, 1 female.

Orchelimum glaberrimum Burm.

La Grange, Sept. 9, 10, 13, 5 males. This species was also heard singing along the banks of the Miami river on Sept. 25. We have followed Rehn and Hebard in using this name for the present species, though it is evidently not the insect to which the name has been applied by Scudder, McNeill, Redtenbacher and others. Burmeister's type came from South Carolina, but his description would cover several of our species of *Orchelimum*. While the present species has a red head like *O. erythrocephalum* of New Jersey, it is much larger. A series from Raleigh, N. C., shows that they are more nearly related to those from Florida, than to *erythrocephalum* from New Jersey, which may prove to be a northern race.

Orchelimum militare R. and H.

La Grange, Sept. 13, 1 male (Ds.), Oct., 3 females (Chaudoin).

Conocephalus gracillimus Morse.

Cocoanut Grove, Sept. 14, 1 male; Big Pine Key, Sept. 19, 20, 2 males, 1 female.

Conocephalus fasciatus DeGeer.

La Grange, Sept. 11, 12, 1 male, 1 female.

GRYLLIDÆ.

Cryptoptilum antillarum Redt.

La Grange, Sept. 10, 1 female; Miami, Sept. 22, 23, 24, 4 males, 8 females, 7 nymphs; Big Pine Key, Sept. 19, 20, 1 female, 3 nymphs; Key West, Sept. 16, 17, 2 females, 2 nymphs .

Cryptoptilum trigonipalpus R. and H.

La Grange, Sept. 12, 3 nymphs; Miami, Sept. 24, 3 nymphs; Big Pine Key, Sept. 19, 20, 5 nymphs; Key West, Sept. 16, 17, 9 nymphs.

Cryptoptilum zebra R. and H.

Ocean Beach, Miami, Sept. 23, 6 males, 7 females. These and others that escaped were found under and in the folds of an old pair of trousers lying on the up-beach.

Nemobius fasciatus socius Scudder.

La Grange, Sept., 1 female.

Nemobius ambiguus Scudder.

La Grange, Sept. 10, 11, 1 male, 1 female, 2 nymphs.

Miogryllus saussurei Scudder.

La Grange, Sept. 12, 1 male; Miami, Sept. 22, 23, 25, 1 male, 5 females, 1 nymph.

Gryllus rubens Scudd.

La Grange, Sept. 11, 1 male; Miami, Sept. 25, 1 female.

Grylloides sigillatus Walk.

Miami, Sept. 22, 24, 25, 1 male, 2 females; Big Pine Key, Sept. 19, 20, 1 male, 1 female. At Miami they were found on the sidewalk in front of a store near the bridge that crosses the river, and at Big Pine Key they lived in Mr. Sands' house, where they were reported as doing some damage by eating clothing, etc. At night when the lights were out they would come out of their hiding and the males would sing their cheerful and very energetic song.

Æcanthus angustipennis Fitch.

La Grange, Sept. 10, 3 males. Collected among the golden rods and other low plants by the side of the road. They also occurred among the small oaks and other trees. The song is loud, about three or four seconds long, with an equal interval of rest. We have found this insect at Lakeland, Florida, on two occasions, but it has not been reported so far from other localities in the state, though no doubt common in some of the northern counties as it is a northern species.

Cyrtoxipha gundachi Sauss.

Miami, Sept. 24, 1 female, 2 nymphs; Big Pine Key, Sept. 19, 20, 2 males, 2 females, 2 nymphs; Key West, Sept. 16, 17, 18, 2 females, 5 nymphs. Adults were much less common than the nymphs, no effort being made to collect all of the latter.

Hapithus quadratus Scudd.

Miami, Sept. 22, 24, 25, 6 males, 7 females; Key West, Sept. 18, 1 female.

Hapithus brevipennis Sauss.

La Grange, Sept. 11, 2 females; Coconut Grove, Sept. 14, 1 male, 1 female.

Orocharis saulcyi Guer.

Miami, Sept. 22, 1 male.

Tafalisca lurida Walk.

La Grange, Sept. 10, 11, 2 males; Big Pine Key, Sept. 19, 20, 2 females (Ds.), Oct., 1 male (Sands).

A REVISION OF THE AMERICAN SPECIES OF
TANYPREMNA OSTEN SACKEN AND MEGIS-
TOCERA WIEDEMANN. (TIPULIDÆ,
DIPTERA.)¹

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This paper is presented in order to complete the American species of the Dolichopezini that are allied to *Megistocera* Wiedemann. These genera are *Brachypremna* Osten Sacken which has been taken up by the author in an earlier paper (Journ. N. Y. Ent. Soc., vol. XX, p. 225-236, 1912), *Tanypremna* Osten Sacken and *Megistocera* Wiedemann which will be considered in the present paper in the order named. A key to the Dolichopezine genera of the world is given in *Psyche*, vol. XIX, p. 64, 1912.

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¹ Contribution from the Entomological Laboratory of Cornell University.